

# BERYLLIUM STATISTICS

By David A. Buckingham and Larry D. Cunningham

[All values are in metric tons (t) unless otherwise noted]

Last modification: August 28, 2002

Year	Production	Imports	Exports	Stocks	Apparent consumption	Unit value (\$/t)	Unit value (98\$/t)	World production
1935	3					249,000	2,960,000	16
1936	1	6			7	249,000	2,920,000	17
1937	3	7			7	220,000	2,490,000	15
1938	1	5			11	220,000	2,540,000	42
1939	3	17			18	220,000	2,580,000	36
1940	4	29			22	99,000	1,200,000	87
1941	6	97			44	99,000	1,100,000	164
1942	10	74		51	85	100,000	1,000,000	120
1943	13	176		40	111	99,000	930,000	218
1944	14	113		5	79	99,000	920,000	118
1945	1	44		3	63	99,000	900,000	39
1946	4	43		32	37	99,000	830,000	68
1947	5	28		14	63	210,000	1,500,000	57
1948	4	62		38	71	210,000	1,400,000	99
1949	17	138		84	37	210,000	1,400,000	183
1950	20	168		95	109	210,000	1,400,000	269
1951	18	176		51	123	210,000	1,300,000	243
1952	19	157		90	126	210,000	1,300,000	301
1953	27	290		181	97	158,000	963,000	298
1954	24	211		149	71	158,000	958,000	279
1955	18	219		105	140	158,000	963,000	323
1956	16	449		168	158	158,000	946,000	468
1957	19	265		264	156	158,000	919,000	410
1958	18	167		164	218	158,000	893,000	279
1959	15	292		140	297	158,000	883,000	406
1960	18	325		99	352	150,000	820,000	446
1961	41	309		177	341	120,000	660,000	468
1962	35	310		198	282	120,000	650,000	399
1963	27	227		315	288	120,000	640,000	265
1964		201	77	261	161	120,000	630,000	178
1965		238	54	259	212	120,000	620,000	222
1966		83	28	284	219	120,000	600,000	165
1967		351	34	297	257	120,000	590,000	197
1968	6	145	43	234	335	120,000	560,000	263
1969		235	14	215	308	130,000	580,000	322
1970		182	18	198	345	130,000	550,000	249
1971		146	19	229	376	130,000	520,000	210
1972		122	44	251	282	130,000	510,000	157
1973		59	50	214	316	110,000	400,000	144
1974		55	65	161	190	132,000	436,000	126
1975		64	17	129	160	131,000	397,000	119
1976		39	52	144	46	131,000	375,000	93
1977		31	73		61	210,000	560,000	103
1978		38	37		246	227,000	568,000	105
1979		39	33		275	227,000	510,000	96
1980	270	67	26		292	265,000	524,000	373
1981	266	79	35	81	278	326,000	585,000	384
1982	198	104	61	186	136	366,000	618,000	327
1983	242	88	17	255	243	392,000	642,000	366
1984	219	80	18	205	303	392,000	615,000	359
1985	209	111	54	181	263	432,000	654,000	326
1986	237	73	36	177	278	450,000	669,000	356
1987	220	133	77	164	289	505,000	725,000	345
1988	212	47	37	158	228	538,000	741,000	332
1989	184	38	34	153	187	575,000	756,000	301
1990	182	25	45	119	175	593,000	740,000	284
1991	174	55	33	112	203	617,000	738,000	263

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1992	193	6	41	111	159	617,000	717,000	278
1993	198	8	20	114	182	650,000	733,000	243
1994	173	53	29	113	198	650,000	715,000	218
1995	202	32	61	162	198	849,000	908,000	247
1996	211	20	57	139	197	849,000	882,000	255
1997	231	20	40	110	316	849,000	862,000	276
1998	243	50	60	80	320	849,000	849,000	289
1999	200	20	40	20	385	849,000	831,000	248
2000	180	20	35	115	300	1,080,000	1,020,000	226

## **Beryllium Worksheet Notes**

### **Data Sources**

Sources of data for the beryllium worksheet are the mineral statistics publications of the U.S. Bureau of Mines and the U.S. Geological Survey—Minerals Yearbook (MYB); Mineral Commodity Summaries (MCS) and its predecessor, Commodity Data Summaries (CDS); Mineral Facts and Problems (MFP); and Metal Prices in the United States through 1998 (MP98). The years of publication and corresponding years of data coverage are listed in the References section below. Blank cells in the worksheet indicate that data are not available.

### **Production**

Production data represent the beryllium content in beryllium-bearing ores that were shipped from mines within the United States. The data are based on a beryllium metal equivalent of 4% in beryl and bertrandite ores, calculated as equivalent to beryl ore containing 11% BeO. Data are not available prior to the year 1935, and for the years 1964–67, and 1969–79. Data for the years 1935–63, 1968, and 1980–2000 are from the MYB.

### **Imports**

Import data are the beryllium content of beryllium ores and/or metal imported into the United States. Data are not available prior to the year 1936. Data for the years 1936–47 are from the MYB. Data for the years 1948–2000 are from the CDS and the MCS.

### **Exports**

Exports represent the beryllium content of various beryllium materials exported from the United States. Export data are not available prior to the year 1942. Data for the years 1942–63 are ambiguous with the beryllium content not definable. For the years 1964–83, data are from the MFP. Data for the years 1984–2000 are from the MCS.

### **Stocks**

Stock data are industry stocks, and represent the beryllium content of various beryllium materials held in producer and consumer inventories as of end of year, December 31. Stock data are not available prior to the year 1942 and the years 1977–80. Data for the years 1942–47 are from the MYB. Data for the years 1948–76 and years 1981–2000 are from the CDS and the MCS.

### **Apparent Consumption**

Apparent consumption data for the years 1935–71 are for beryl ore only, reported in terms of the beryllium content. For the year 1935 apparent consumption equals production. Data for the years 1972–99 represent the total beryllium content of various beryllium materials consumed in the United States. Data for the years 1936–47 are from the MYB. Data for the years 1948–2000 are from the CDS and MCS.

### **Unit Value (\$/t)**

Unit value is defined as the value of 1 metric ton (t) of beryllium apparent consumption. In years prior to 1947, unit value is estimated by using the average beryllium metal market price as reported in the MYB. Unit value data for the years 1947–2000 are estimated by using the average beryllium metal market price as reported in the MP98 and the MYB.

### **Unit Value (98\$/t)**

The Consumer Price Index conversion factor, with 1998 as the base year, is used to adjust unit value in current U.S. dollars to the unit value in constant 1998 U.S. dollars.

### **World Production**

World production represents the beryllium content of beryllium-bearing ores that are produced from mines throughout the world. Data are based on a beryllium metal equivalent of 4% Be in beryl and bertrandite ores, calculated as equivalent to beryl ore containing 11% BeO. Data are not available prior to the year 1935. Data are from the MYB.

### **References**

- U.S. Bureau of Mines, 1933–96, Minerals Yearbook, 1932–94.
- U.S. Bureau of Mines, 1957, Commodity Data Summaries, 1957.
- U.S. Bureau of Mines, 1975, Mineral Facts and Problems, 1975 ed.: U.S. Bureau of Mines Bulletin 667.
- U.S. Bureau of Mines, 1978–95, Mineral Commodity Summaries, 1978–95.
- U.S. Bureau of Mines, 1980, Mineral Facts and Problems, 1980 ed.: U.S. Bureau of Mines Bulletin 671.
- U.S. Bureau of Mines, 1985, Mineral Facts and Problems, 1985 ed.: U.S. Bureau of Mines Bulletin 675.
- U.S. Geological Survey, 1997–2002, Mineral Commodity Summaries, 1997–2002.
- U.S. Geological Survey, 1997–2002, Minerals Yearbook, v. I, 1995–2000.
- U.S. Geological Survey, 1999, Metal Prices in the United States through 1998.

U.S. Geological Survey and U.S. Bureau of Mines, 1996, Mineral Commodity Summaries, 1996.

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